



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,301	05/10/2001	Naoto Kinjo	Q63870	3820

7590 03/17/2006

SUGHRUE MION ZINN MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER

THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,301

Applicant(s)

KINJO, NAOTO

Examiner

James A. Thompson

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 December 2005 has been entered.

Response to Arguments

2. Applicant's arguments filed 27 December 2005 have been fully considered but they are not persuasive. While Examiner agrees with Applicant that the present amendments to the claims are not taught in Hayashi (US Patent 6,271,934 B1), additional prior art has been discovered which renders the claims obvious to one of ordinary skill in the art at the time of the invention. Accordingly, new prior art rejections are set forth below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2625

4. Claims 2-3, 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278).

Regarding claim 2: Michel discloses previously setting at least one user input representing a condition of an image (column 5, lines 44-53 of Michel) or a direction of correction of the image (column 6, lines 1-8 of Michel), at least one level indicative input as to a degree of improperness of the image of a degree of the correction to be executed to the image (column 6, line 62 to column 7, line 3 of Michel) and at least one image correction condition corresponding to the user input and the level indicative input (column 7, lines 9-14 of Michel); inputting the user input and the level indicative input as a correction instruction according to the image (column 5, lines 44-45 and lines 50-51; and column 7, lines 1-2 of Michel); and correcting the image under the corresponding image correction condition according to the input user input (column 6, lines 1-8 of Michel) and the level indicative input (column 7, lines 1-8 of Michel), wherein a plurality of image correction conditions of different intensities are set with respect to the user input (figure 1; column 5, lines 53-60; and column 7, lines 1-3 of Michel) and one of the image correction conditions is selected based on the level indicative input (column 7, lines 1-3 and lines 9-14 of Michel).

Michel does not disclose expressly that said user input and said level indicative input are verbal expressions.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Michel is analogous art since Michel is in the same field of endeavor as the present application, namely the calibration

Art Unit: 2625

and correction of digital image data. Michel and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input the user input and level indicative input, taught by Michel, as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Michel. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel to obtain the invention as specified in claim 2.

Regarding claim 3: Michel discloses previously setting at least one user input representing a condition of an image (column 5, lines 44-53 of Michel) or a direction of correction of the image (column 6, lines 1-8 of Michel), at least one level indicative input as to a degree of improperness of the image of a degree of the correction to be executed to the image (column 6, line 62 to column 7, line 3 of Michel) and at least one image correction condition corresponding to the user input and the level indicative input (column 7, lines 9-14 of Michel); inputting the user input and the level indicative input as a correction instruction according to the image (column 5, lines 44-45 and lines 50-51; and column 7, lines 1-2 of Michel); and correcting the image under the corresponding image correction condition according to the input user input (column 6, lines 1-8 of Michel) and the level indicative input (column 7, lines 1-8 of Michel), wherein a relationship between a set of the user input and the level indicative input first input with respect to

Art Unit: 2625

the image and correction of the image finally made is totalized (column 7, lines 3-8 of Michel), and the image correction condition corresponding to the user input and the level indicative input is updated according to the result of totalization (column 7, lines 9-14 of Michel).

Michel does not disclose expressly that said user input and said level indicative input are verbal expressions.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Michel is analogous art since Michel is in the same field of endeavor as the present application, namely the calibration and correction of digital image data. Michel and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input the user input and level indicative input, taught by Michel, as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Michel. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel to obtain the invention as specified in claim 3.

Regarding claim 7: Michel discloses that the condition setting algorithm of image processing is updated according to the result of the totalization (column 7, lines 3-8 of Michel).

Regarding claim 16: Michel discloses that a plurality of images corrected under the image correction conditions are reproduced according to the user input (input verbal expression

Art Unit: 2625

according to Michel in view of Bernardi, as discussed above)
(column 7, lines 11-14 and lines 57-65 of Michel).

5. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278) and Wong (US Patent 6,557,102 B1).

Regarding claim 4: Michel in view of Bernardi discloses that a relationship between the verbal expression first input with respect to the image and the correction of the image finally made is totalized, as discussed above in the arguments regarding claim 3, upon which claim 4 is dependent.

Michel in view of Bernardi does not disclose expressly that image scenes of the images are sorted by using image characteristic values of the images and the totalization is performed for each of the image scenes sorted.

Wong discloses sorting image scenes of images (column 5, lines 29-32 of Wong) by using image characteristic values of the image (column 5, lines 49-53 and lines 57-59 of Wong).

Michel in view of Bernardi is combinable with Wong because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort the images, as taught by Wong, and then perform the totalization taught by Michel on said sorted images. The motivation for doing so would have been to be able to determine the authenticity of an image by being able to examine the data associated with the image (column 2, lines 24-29 of Wong). Therefore, it would have been obvious to combine Wong with

Art Unit: 2625

Michel in view of Bernardi to obtain the invention as specified in claim 4.

Regarding claim 5: Michel in view of Bernardi discloses that a relationship between the verbal expression first input with respect to the image and the correction of the image finally made is totalized, and the image correction condition corresponding to the verbal expression is updated according to the result of totalization, as discussed above in the arguments regarding claim 3, upon which claim 5 is dependent.

Michel in view of Bernardi does not disclose expressly that, when the image is reproduced on a photographic print, the image is sorted according to at least one of printing method, type of printing paper, printer model, individual printer used, operator using the printer, and laboratory store concerned; and that said sorting is performed before said totalization is performed for each sorting process.

Wong discloses that, when the image is reproduced on a photographic print (column 3, lines 52-57 of Wong), the image is sorted according to at least one of printing method, type of printing paper, printer model, individual printer used, operator using the printer, and laboratory store concerned (column 5, lines 57-59 of Wong). The image is originally captured on a photographic print (column 3, line 56 of Wong) and then digitized (column 3, lines 52-57 of Wong). The digitization of the film is part of the sorting process since, when an image is scanned in (column 4, lines 60-65 of Wong), it is archived according to various image properties (column 5, lines 57-59 of Wong).

Michel in view of Bernardi is combinable with Wong because they are from the same field of endeavor, namely image data

Art Unit: 2625

processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort the images, as taught by Wong, and then perform the totalization taught by Michel on said sorted images for each sorting process. The motivation for doing so would have been to be able to determine the authenticity of an image by being able to examine the data associated with the image (column 2, lines 24-29 of Wong). Therefore, it would have been obvious to combine Wong with Michel in view of Bernardi to obtain the invention as specified in claim 5.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278) and Hisatake (US Patent 5,669,040).

Regarding claim 6: Michel discloses previously setting at least one user input representing a condition of an image (column 5, lines 44-53 of Michel) or a direction of correction of the image (column 6, lines 1-8 of Michel), at least one level indicative input as to a degree of improperness of the image of a degree of the correction to be executed to the image (column 6, line 62 to column 7, line 3 of Michel) and at least one image correction condition corresponding to the user input and the level indicative input (column 7, lines 9-14 of Michel); inputting the user input and the level indicative input as a correction instruction according to the image (column 5, lines 44-45 and lines 50-51; and column 7, lines 1-2 of Michel); and correcting the image under the corresponding image correction condition according to the input user input (column 6, lines 1-8 of Michel) and the level indicative input (column 7, lines 1-8

Art Unit: 2625

of Michel), wherein a plurality of image correction conditions having different image correcting algorithms are set with respect to the user input (figure 1; column 5, lines 53-60; and column 7, lines 1-3 of Michel); image correction is performed by selecting one of the image correction conditions based on the level indicative input (column 7, lines 1-3 and lines 9-14 of Michel).

Michel does not disclose expressly that said user input and said level indicative input are verbal expressions; that a number of times each of the image correction conditions is selected is totalized; and that a priority order of each of the plurality of image correction conditions is updated according to a result of totalization.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Michel is analogous art since Michel is in the same field of endeavor as the present application, namely the calibration and correction of digital image data. Michel and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input the user input and level indicative input, taught by Michel, as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Michel. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel.

Michel in view of Bernardi does not disclose expressly that a number of times each of the image correction conditions is selected is totalized; and that a priority order of each of the plurality of image correction conditions is updated according to a result of totalization.

Hisatake discloses a number of times (figure 4a("job amount") of Hisatake) each of the image output conditions (figure 4a("copy", "fax", "print") of Hisatake) is selected is totalized (figure 4a and column 10, lines 23-30 of Hisatake); and a priority order of each of the plurality of image output conditions is updated according to a result of totalization (figure 4b and column 10, lines 53-58 of Hisatake).

Michel in view of Bernardi is combinable with Hisatake because they are from similar problem solving areas, namely the prioritization of computational operations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform prioritization as taught by Hisatake on the image correction conditions taught by Michel. The motivation for doing so would have been to more efficiently operate a limited-capacity computational device. Therefore, it would have been obvious to combine Hisatake with Michel in view of Bernardi to obtain the invention as specified in claim 6.

7. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278) and Enomoto (US Patent 6,034,759).

Regarding claims 8 and 13: Michel in view of Bernardi does not disclose expressly that density control according to a result of extraction of an essential portion is included as

image processing, and recomputation of an amount of density control according to the result of extraction of the essential portion is included as an image correction according to said verbal expression.

Enomoto discloses performing density control according to a result of extraction of an essential portion (column 11, lines 45-49 of Enomoto), and recomputing an amount of density control according to the result of extraction of the essential portion (column 11, lines 50-51 and equation 1 of Enomoto). Controlling the exposure amount (column 11, lines 45-49 of Enomoto) inherently controls the density since the density is related to the exposure amount, as shown in detail in column 11, line 50 to column 12, line 20 of Enomoto.

Michel in view of Bernardi is combinable with Enomoto because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide density control for the image, as taught by Enomoto. The motivation for doing so would have been provide optimal printing for the principal portion of the image (column 1, lines 46-49 of Enomoto). Therefore, it would have been obvious to combine Enomoto with Michel in view of Bernardi to obtain the invention as specified in claims 8 and 13.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278) and well-know prior art.

Regarding claim 9: Michel discloses previously setting at least one user input representing a condition of an image (column 5, lines 44-53 of Michel) or a direction of correction

Art Unit: 2625

of the image (column 6, lines 1-8 of Michel), at least one level indicative input as to a degree of improperness of the image of a degree of the correction to be executed to the image (column 6, line 62 to column 7, line 3 of Michel) and at least one image correction condition corresponding to the user input and the level indicative input (column 7, lines 9-14 of Michel); inputting the user input and the level indicative input as a correction instruction according to the image (column 5, lines 44-45 and lines 50-51; and column 7, lines 1-2 of Michel); and correcting the image under the corresponding image correction condition according to the input user input (column 6, lines 1-8 of Michel) and the level indicative input (column 7, lines 1-8 of Michel).

Michel further discloses, in correction processing of the image, a numerical input mode to input the correction instructions (column 5, lines 55-57 and column 7, lines 2-3 of Michel).

Michel does not disclose expressly that said user input and said level indicative input are verbal expressions; and that switching is performed between said verbal input mode and said numerical input mode.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Michel is analogous art since Michel is in the same field of endeavor as the present application, namely the calibration and correction of digital image data. Michel and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input the user input and

Art Unit: 2625

level indicative input, taught by Michel, as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Michel. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel.

Michel in view of Bernardi does not disclose expressly that switching is performed between said verbal input mode and said numerical input mode.

Official notice is given that switching between two modes of input is old, well-known and expected in the art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to switch between said verbal input mode taught by Bernardi and said numerical input mode taught by Michel. The motivation for doing so would have been to have multiple possible ways of entering data, depending upon user preference, in case one form of input does not work well for a particular user or in particular circumstances.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278) and Higurashi (US Patent 6,011,896).

Regarding claim 10: Michel in view of Bernardi does not disclose expressly that said totalization is performed with respect to a predetermined number of frames.

Higurashi discloses performing error correction for a predetermined number of frames (column 5, lines 5-7 of Higurashi).

Michel in view of Bernardi is combinable with Higurashi because they are from the same field of endeavor, namely digital image data processing and correction. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform error correction for a predetermined number of frames, as taught by Higurashi, said error correction being the totalization taught by Michel. The motivation for doing so would have been that a predetermined number of frames should be used due to a limited amount of available memory in a practical system (figure 1 and column 1, line 63 to column 2, line 1 of Higurashi). Therefore, it would have been obvious to combine Higurashi with Michel in view of Bernardi to obtain the invention as specified in claim 10.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278), Wong (US Patent 6,557,102 B1), and Kashiyaama (US Patent 6,295,415 B1).

Regarding claim 11: Michel in view of Bernardi and Wong does not disclose expressly that the image scenes are sorted between ordinary scenes, overexposure scenes, and underexposure scenes.

Kashiyaama discloses sorting image scenes between ordinary scenes, overexposure scenes, and underexposure scenes (figure 3 and column 6, lines 9-13 of Kashiyaama).

Michel in view of Bernardi and Wong is combinable with Kashiyaama because they are from the same field of endeavor, namely digital image data processing and correction. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort image scenes according to the

Art Unit: 2625

teachings of Kashiyama. The motivation for doing so would have been to be able to obtain different exposures rates for a picture as desired by the operator (column 1, lines 33-41 of Kashiyama). Therefore, it would have been obvious to combine Kashiyama with Michel in view of Bernardi and Wong to obtain the invention as specified in claim 11.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278), Wong (US Patent 6,557,102 B1), Kashiyama (US Patent 6,295,415 B1), and obvious engineering design choice.

Regarding claim 12: Michel in view of Bernardi and Wong does not disclose expressly that the image scenes are sorted between portraits, scenery, night views, underexposure scenes, and high contrast scenes.

Kashiyama discloses sorting image scenes based on exposure data, including underexposure scenes (figure 3 and column 6, lines 9-13 of Kashiyama).

Michel in view of Bernardi and Wong is combinable with Kashiyama because they are from the same field of endeavor, namely digital image data processing and correction. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort image scenes according to the teachings of Kashiyama. The motivation for doing so would have been to be able to obtain different exposures rates for a picture as desired by the operator (column 1, lines 33-41 of Kashiyama). Therefore, it would have been obvious to combine Kashiyama with Michel in view of Bernardi and Wong.

It would have been an obvious engineering design choice to organize the exposure categories taught by Kashiya specifically into categories of portraits, scenery, night views, underexposure scenes, and high contrast scenes, each of said categories requiring different exposure rates in order to obtain a pleasing resultant picture. The obvious advantage of such a specific organization is to allow the user to obtain a specifically desired print for a specifically desired type of picture, each type requiring a different exposure rate (column 1, lines 33-41 of Kashiya) due to the lighting conditions, among others. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system taught by Michel in view of Bernardi, Wong and Kashiya to provide for the aforementioned specific categories.

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278), Hisatake (US Patent 5,669,040), and Enomoto (US Patent 6,034,759).

Regarding claim 14: Michel in view of Bernardi and Hisatake does not disclose expressly that density control according to a result of extraction of an essential portion is included as image processing, and recomputation of an amount of density control according to the result of extraction of the essential portion is included as an image correction according to said verbal expression.

Enomoto discloses performing density control according to a result of extraction of an essential portion (column 11, lines 45-49 of Enomoto), and recomputing an amount of density control according to the result of extraction of the essential portion

Art Unit: 2625

(column 11, lines 50-51 and equation 1 of Enomoto). Controlling the exposure amount (column 11, lines 45-49 of Enomoto) inherently controls the density since the density is related to the exposure amount, as shown in detail in column 11, line 50 to column 12, line 20 of Enomoto.

Michel in view of Bernardi and Hisatake is combinable with Enomoto because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide density control for the image, as taught by Enomoto. The motivation for doing so would have been provide optimal printing for the principal portion of the image (column 1, lines 46-49 of Enomoto). Therefore, it would have been obvious to combine Enomoto with Michel in view of Bernardi and Hisatake to obtain the invention as specified in claim 14.

13. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278), well-known prior art, and Enomoto (US Patent 6,034,759).

Regarding claim 15: Michel in view of Bernardi and well-known prior art does not disclose expressly that density control according to a result of extraction of an essential portion is included as image processing, and recomputation of an amount of density control according to the result of extraction of the essential portion is included as an image correction according to said verbal expression.

Enomoto discloses performing density control according to a result of extraction of an essential portion (column 11, lines 45-49 of Enomoto), and recomputing an amount of density control

Art Unit: 2625

according to the result of extraction of the essential portion (column 11, lines 50-51 and equation 1 of Enomoto). Controlling the exposure amount (column 11, lines 45-49 of Enomoto) inherently controls the density since the density is related to the exposure amount, as shown in detail in column 11, line 50 to column 12, line 20 of Enomoto.

Michel in view of Bernardi and well-known prior art is combinable with Enomoto because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide density control for the image, as taught by Enomoto. The motivation for doing so would have been provide optimal printing for the principal portion of the image (column 1, lines 46-49 of Enomoto). Therefore, it would have been obvious to combine Enomoto with Michel in view of Bernardi and well-known prior art to obtain the invention as specified in claim 15.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



06 March 2006

James A. Thompson
Examiner
Division 2625



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600